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FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 09/884,406 06/19/2001 Benjamin Lee Hertzler 06074 USA 2276 EXAMINER 04/07/2004 23543 7590 AIR PRODUCTS AND CHEMICALS, INC. JOHNSON, JONATHAN J PATENT DEPARTMENT ART UNIT PAPER NUMBER 7201 HAMILTON BOULEVARD ALLENTOWN, PA 181951501 1725

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/884,406	HERTZLER, BEN.	JAMIN LEE			
Office Action Summary	Examiner	Art Unit	174.			
	Jonathan Johnson	1725				
The MAILING DATE of this communication ap	pears on the cover sheet wi	th the correspondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPL	V IS SET TO EXPIRE 3 M	ONTH(S) FROM				
THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a replaced in the period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).		eply be timely filed y (30) days will be considered timely THS from the mailing date of this α IANDONED (35 U.S.C. § 133).	y. ommunication.			
Status						
1) Responsive to communication(s) filed on 4-11	1-03.					
,	s action is non-final.					
3) Since this application is in condition for allows	ance except for formal matt	ers, prosecution as to the	merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application	า.					
4a) Of the above claim(s) <u>2-4,6,8-10,14-16,18 and 20</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1,5,7,11-13,17 and 19</u> is/are rejected	d.					
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-20</u> are subject to restriction and/or	election requirement.					
Application Papers		,				
9) The specification is objected to by the Examin	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached	I Office Action or form PT	⊺O-152.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreigna) All b) Some * c) None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).				
 Certified copies of the priority document 	nts have been received.	,				
Certified copies of the priority document						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)	,, □					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview S Paper No(s	Summary (PTO-413) s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 6-19-01; 4-11-03.		nformal Patent Application (PTC	D-152)			

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DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

- I. Claims 2-4, and 14-16 are drawn to the purification media.
- II. Claims 8 and 9 are drawn to the storage/dispensing vessel.
- III. Claims 5, 7, 17, and 19 are drawn to the purifier conduit.
- IV. Claims 6, 10, 18 and 20 are drawn to the arrangement of the purification media.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 1 and 11-13 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

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Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Geoffrey Chase on 3-11-04 a provisional election was made with traverse to prosecute the invention of Group III, claims 1, 5, 7, 11-13, 17, and 19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2-4, 6, 8-10, 14-16, 18, and 20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim 1, 5, 7, 11-13, 17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,125,131 (Brandes et al.). With respect to Claim 1, Brandes et al. teach a storage and dispensing vessel having a gas outlet conduit and an interior section containing a solid-phase physical sorbent medium having physically sorptive affinity for a gas, said sorbent medium having said gas physically sorptively loaded on said sorbent medium (Figure 1, item 16): and a purifier comprising at least one layer of purification media located in the interior section of said storage and dispensing vessel wherein said purification media is located adjacent to said gas outlet conduit of said vessel and is adapted to provide that any gas desorbed from said sorbent medium must pass through and contact said purification media prior to exiting said vessel through said outlet conduit (Figure 1, items 19 and 32).

With respect to Claim 5, the teachings of Brandes et al. are the same as relied upon in the rejection of Claim 1. Brandes et al. teach said purifier includes a purifier conduit, one end of said purifier conduit being sealingly attached to said gas outlet conduit of said vessel, and a second end of said purifier conduit open to said interior section of said vessel containing said solid-phase physical sorbent medium, said purifier conduit including said at least one layer of purification media disposed in said purifier conduit, whereby any desorbed gas withdrawn from said vessel must pass through said purifier conduit from said end of said purifier conduit open to said interior section containing said solid-phase physical sorbent medium through to said end

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of said purifier conduit sealingly attached to said gas outlet conduit (Figure 1, items 19 and 32).

With respect to Claim 7, the teachings of Brandes et al. are the same as relied upon in the rejection of Claim 1. Brandes et al. teach one end of said purifier conduit being sealingly attached to said gas outlet conduit of said vessel, and a second end of said purifier conduit open to said interior section of said vessel containing said solid-phase physical sorbent medium, said purifier conduit including said at least one layer of purification media disposed in said purifier conduit, and wherein said purifier further includes at least one layer of purification media adjacent to and covering said second end of said purifier conduit, whereby any desorbed gas withdrawn from said vessel must first pass through and contact said at least one layer of purification media adjacent to said second end of said purifier conduit and then through said purifier conduit to reach said outlet conduit of said vessel (Figure 1, items 19 and 32).

With respect to Claim 11, Brandes et al. teach an adsorbent based gas delivery system comprising: (a) a storage and dispensing vessel having a gas outlet conduit and an interior section containing a solid-phase physical sorbent medium having physically sorptive affinity for a gas, said sorbent medium having said gas physically sorptively loaded on said sorbent medium (Col. 5, 1l. 55-65); and (b) a purifier comprising a purification media generally homogeneously mixed with said sorbent medium in the interior section of said storage and dispensing vessel such that substantially any gas desorbed from said sorbent medium must pass through and contact said purification media prior to exiting said vessel through said outlet conduit (col. 6, 1l. 29-34).

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With respect to Claim 12, Brandes et al. teach a storage and dispensing vessel having a gas outlet conduit and an interior section containing a solid-phase physical sorbent medium having physically sorptive affinity for a gas, said sorbent medium having said gas physically sorptively loaded on said sorbent medium (Figure 1, item 16); (b) a purifier comprising at least one layer of purification media located in the interior section of said storage and dispensing vessel wherein said purification media is located adjacent to said gas outlet conduit of said vessel and is adapted to provide that any gas desorbed from said sorbent medium must pass through said purification media prior to exiting said vessel through said outlet conduit (col. 5, ll. 15-25); and (c) said storage and dispensing vessel having a gas inlet conduit for supplying said gas from an external source into said vessel, said gas inlet conduit separate from said gas outlet conduit (Figure 1, items 32 and 19).

With respect to Claim 13, the teachings of Brandes et al. are the same as relied upon in the rejection of Claim 12. Brandes et al. teach wherein said gas inlet conduit is adapted to provide that said inlet gas does not pass through said purifier (Figure 1, items 32 and 19).

With respect to Claim 17, the teachings of Brandes et al. are the same as relied upon in the rejection of Claim 12. Brandes et al. teach said purifier includes a purifier conduit, one end of said purifier conduit being sealingly attached to said gas outlet conduit of said vessel, and a second end of said purifier conduit open to said interior section of said vessel containing said solid-phase physical sorbent medium, said purifier conduit including said at least one layer of purification media disposed in said purifier conduit, whereby any desorbed gas withdrawn from

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said vessel must pass through said purifier conduit from said end of said purifier conduit open to said interior section containing said solid-phase physical sorbent medium through to said end of said purifier conduit adjacent to said gas outlet conduit (Figure 1, item 19).

With respect to Claim 19, the teachings of Brandes et al. are the same as relied upon in the rejection of Claim 12. Brandes et al. teach said purifier includes a purifier conduit, one end of said purifier conduit being sealingly attached to said gas outlet conduit of said vessel, and a second end of said purifier conduit open to said interior section of said vessel containing said solid-phase physical sorbent medium (Figure 1, item 19), said purifier conduit including said at least one layer of purification media disposed in said purifier conduit, and wherein said purifier further includes at least one layer of purification media adjacent to and covering said second end of said purifier conduit, whereby any desorbed gas withdrawn from said vessel must first pass through and contact said at least one layer of purification media adjacent to said second end of said purifier conduit and then through said purifier conduit to reach said outlet conduit of said vessel (Figure 1, item 11).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7AM-5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Johnson Examiner

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